ATTACHMENT II

LOUISIANA TECHNOLOGY INNOVATIONS FUND – SEMI-ANNUAL PROGRESS REPORT

March 7, 2005

[This report is due on March 1 and September 1 each year. Limit the length of the report to three pages]

I　　　　**DEPARTMENT/AGENCY　　　LSUHSC-S**

II　　　　**PROJECT TITLE / Log #   Managing Medications and Medical Supplies / #01-002**

III　　　　**PROJECT LEADER　　Lee Bairnsfather, Ph.D., LSUHSC-S, 1501 Kings Highway, Shreveport, LA 71130,**
　　　　　　　　　　　　(318) 675-6535, (318) 675-7757, lbairn@lsuhsc.edu

　　　　　　Name, Agency, Mailing Address, Phone Number, FAX Number, Internet E-mail address, Project Web page link (if applicable)

IV　　　　**DESCRIPTION OF THE PROJECT**
　　　　　　In the time since LSUHSC-Shreveport was awarded the LTIF grant "Saving Livings and Enhancing Efficiency: Managing Medications and Medical Supplies," the healthcare industry and the government has strongly recommended that all hospitals strive to achieve the same goals that we originally proposed. To address these goals, we are working to reduce medication errors, to improve the efficiency of physicians and hospital personnel, and to improve our billing and collection systems through an integrated plan of information technology improvements and organizational changes. The entire project will take over three years to implement and will result in: (1) an upgrade to our Pharmacy system; (2) a new system to monitor patient medications through the use of wireless technology and barcode scanners; (3) a new system in which physicians place their own orders for medications, laboratory, and radiology tests, consultations, and dietary plans; and (4) a "rules engine" that will advise physicians and nurses regarding appropriate procedures, standard of care, and potential safety infractions.

V　　　　**PROJECT STATUS**

A.　　　Brief Summary
　　　　　　The project is complete. Hospital Administration and nursing staff have become enthusiastic proponents of the Medication Administration Check (MAK) system and the electronic "safety net" that it provides. Statistics regarding the number of adverse drug events that have been prevented by MAK will be summarized in the final report. The Computerized Physician Order Entry (CPOE) system is now being used by all staff and residents in Psychiatry. Customization for each of the other medical services will continue.

B.　　　Accomplishments

　　　　　　The use of this combination of MAK and CPOE to improve patient safety and enhance efficiency has been attempted by fewer than 10% of the hospitals in the country. We are presently working with LSUHSC-New Orleans and the Health Care Services Division to explore possibilities of expanding the use of MAK and CPOE functionality through the VISTA system developed for the VA hospitals.

C.　　　Problems Encountered/Action Taken or Planned

　　　　　　Because the use of wireless technology and barcode scanners is a new approach to addressing the problem of medication management and patient safety, we have been one of the first hospitals to implement

the technology, and there has been much to learn. Although initial plans were to use a wireless handheld device, nursing staff found that the small screen size would not be sufficient to perform all needed functions and to ensure patient safety for the MAK Project. As a result, we conducted an extensive review of alternative systems and chose a PC-based wireless system that was integrated into the medication administration (MAK) carts. The system is still be wireless and mobile but uses of a 17" flat-screen monitor to provide the nurses with access to additional information needed prior to administering medications (for example, a history of patient blood pressure, temperature, and other physiological parameters that might modify some aspect of drug administration). Because of this need to change from a handheld device to PC-based wireless device, we applied for and received a one-year extension to the project.

In the Intensive Care Units (ICUs), we also modified the system to use a stationary, mounted PC because of the congestion of electronic devices and the safety problems associated with a rolling device. The wireless scanner was still used.

D.   Major Milestones, (Original versus Current Estimate)

The project is complete.

VI   COST VS. BUDGET

	Category	Budgeted	Actual	Projected Surplus
A.	Equipment	850,000	244,558	343
B.	Software	100,000	-0-	-0-
C.	Telecommunications	-0-	-0-	-0-
D.	Professional/Contract Services	-0-	43,165	-0-
E.	Other Costs	-0-	15,120	-0-
	Total Project Cost	**950,000**	**949, 657**	**343**

VII   ITEMIZED EXPENSES AND FINANCIAL OBLIGATIONS INCURRED DURING ENTIRE REPORTING PERIOD

[*Include description, unit cost, quantity, and total cost for incurred expenses such as equipment, software, and telecommunications. Include contract title, name of contractor, OCR or P.O. Number, and amount for Professional Services and/or other Contract Services.*]

Vendor	P.O. NBR.	Qty	Unit Cost	Total Cost	Description	Type
Pioneer Std Elec	06004280	1	71,251.90	71251.90	Pharmacy System	Equipment
Pioneer Std Elec	06004280	1	1,486.58	1486.58	Pharmacy System	Equipment
Pioneer Std Elec	06004280	1	891.50	891.50	Pharmacy System	Equipment
Pioneer Std Elec	06004280	1	23,540.79	23540.79	DS20e & StorageWorks Warranty	Maintenance
Pioneer Std Elec	06004280	-	3.98	3.98	Freight	Freight
Global	06004603	3	699.00	2097.00	Cisco 802.1 lb Ap w/avail Chas Slot	Equipment
Global	06004603	5	195.00	975.00	Cisco Omni Ceiling Antenna	Equipment
Global	06004603	3	240.00	240.00	Cisco maintenance	Maintenance
Global	06004603	1	2,797.00	2797.00	Cisco Catalyst Enterprise Ed	Software
Global	06004603	1	447.00	447.00	Cisco 24x7 maintenance	Maintenance
Global	06004603	1	4,197.00	4197.00	Cisco Secure Acs 3.0 for Windows	Software
Global	06004603	1	1,020.00	1020.00	Cisco Secure Access Control Server	Maintenance
Global	06004603	-	495.00	495.00	Freight	Freight

Vendor	PO Number	Qty	Unit Price	Total	Description	Category
Dell Marketing	06006114	11	967.98	10647.78	DellOptiplexGX260	Equipment
Comark Gov't	06006115	2	1,400.13	2800.26	HP LaserJet 4100N Printer	Equipment
NetManage, Inc.	06007546	1	1,250.00	1250.00	Rumba for Terminal Server V6.0	Software
NetManage, Inc.	06007546	-	5.89	5.89	Freight	Freight
Zones	06008118	1	1,890.00	1890.00	Genicom Serial Matrix Printer	Equipment
Zones	06008118	-	75.00	75.00	Freight	Freight
Global Data Sys	06009007	1	9,600.00	9600.00	Internetworking Services	Software
CDW	06009636	3	1,870.00	5610.00	Genicom Serial Matrix Printer	Equipment
Global	06009635	2	608.65	1217.30	Okidata Printer	Equipment
Global	06009635	-	39.64	39.64	Freight	Freight
Pioneer Std.	06009561	4	285.00	1140.00	Lantronix Print Server	Supplies
Pioneer Std.	06009561	-	12.03	12.03	Freight	Freight
Global Data Sys	06009974	1	5,246.41	5246.41	CiscoWireless LAN Soln.	Equipment
Global Data Sys	06009974	1	73,706.00	73706.00	CiscoAironet	Equipment
Global Data Sys	06009974	1	8,786.07	8786.07	Cisco Catalyst3550	Equipment
Oberion	06011257	100	197.44	19744.00	PlenumCeilingEnclosures	Supplies
Oberion	06011257	200	29.95	5990.00	Material for Ceiling Enclosure	Supplies
Dell	06010467	1	5,168.00	5168.00	DellPowerEdge 1650, 36GB	Equipment
Dell	06010467	1	6,570.50	6570.50	DellPowerEdge1650, 146GB	Equipment
Dell	06011004	1	7,540.85	7540.85	DellPowerEdge 2650 Intel Processor	Equipment
Dell	06011391	2	1,529.00	3058.00	Dell Inspiron1100 Intel4 Processor	Equipment
Global	06012339	1	7,407.15	7407.15	Cisco 48port for Catalyst6500	Equipment
Work Order	00119837	1	999.84	999.84	Wireless Installation	Telecomm
Work Order	00119837	1	171.00	171.00	Wireless Installation	Telecomm
Telecommunications	GO9622	1	770.26	770.26	Cabling	Telecommun
SystemID	ProcureCard	1	221.00	221.00	USB Kit	Supplies
GovConnection	06017639	1	1,397.01	1397.01	Pharmacy/ Ck Barcode on Meds	Equipment
NaWare Mobile	06018475	3	4,554.00	13662.00	Medication Admin Mobil Cart	Equipment
National Barcode	06018860	5	1,050.00	5250.00	Wireless Scanners	Equipment
National Barcode	06018860	-	16.00	16.00	Wireless Scanners	Freight
DigiTrax Corp	06019968	4	695.00	2780.00	MAK Armband printers	Equipment
DigiTrax Corp	06019968	-	50.00	50.00	Freight	Freight
Enovate, IT	06021769	87	4,300.00	374100.00	Med Admin Check Carts	Equipment
En Point Technol	06021797	101	248.99	25147.99	Barcode scanner kit	Supplies
En Point Technol	06021797	-	90.00	90.00	Freight	Freight
CDW-G	06022368	18	105.00	1890.00	Cisco802.11A/B/G CardbusAdap	Supplies
Global Data Sys	06022621	69	96.33	6646.77	Cisco802.11A/B/G CardbusAdap	Supplies
Dell	06022910	8	938.00	7504.00	DellDim2400Series	Equipment
Dell	06023835	40	415.75	6236.25	HD Combo Flat Panel/Keyboard Arm	Supplies
Dell	06023835	15	107.10	1606.50	18" extension for HD series arm	Supplies
Dell	06023835	40	873.14	34925.60	DellOptiplexSX280	Equipment
Enovate IT	06023947	25	347.00	8675.00	AM-2310 Desk Mounts	Supplies
Enovate IT	06023833	22	4,300.00	94600.00	MobileAdminCompCarts [22]	Equipment
InsightPublicSector	06023832	1	1,108.26	1108.26	HP Laserjet 4250 Printer	Equipment
InsightPublicSector	06023832	1	1,314.83	1314.83	HP Laserjet 4250tn (two-tray) Printer	Equipment
Circuit Specialists	06023952	1	1,899.00	1899.00	Field Strength Analyzer	Equipment
Circuit Specialists	06023952	-	16.97	16.97	Freight	Freight
Alan Broadband	06023953	1	549.00	549.00	ZapChecker/LogPeriodAntenna	Supplies
Alan Broadband	06023953	-	50.00	50.00	Freight	Freight
Alan Broadband	06023953	-	16.00	16.00	Freight	Freight
Network Orange	06023943	1	4,495.50	4495.50	Air Magnet Mobile Suite	Equipment
Network Orange	06023943	1	8,095.50	8095.50	AirMagnet Enterprise Starter Suite	Equipment
Network Orange	06023943	3	1,912.50	1912.50	AirMagnet Add'l Sensor	Equipment
Sunnytech	06024189	10	22.00	220.00	Zippy WK-712 Keyboards	Supplies
CDW-G	06024155	22	105.00	2310.00	Cisco wireless cards	Supplies
CDW-G	06024155	-	22.09	22.09	Freight	Freight

Dell	06024300	2	837.00	1674.00	DellDimension2400/ER Psych	Equipment
Dell	06024300	-	42.01	42.01	Freight	Freight
Howard Computers	06024877	10	669.00	6690.00	Spare Processors	Equipment
SunnyTech	06024825	10	22.00	220.00	Keyboards	Supplies
EnPointe Technol	06021797A	92	248.99	22907.08	Barcode scanners	Supplies
Global Data Sys	06024980	1	5,351.85	5351.85	Wireless Solution/Cards	Equipment
Global Data Sys	06024980	7	106.47	745.29	CardBus Adapter	Supplies
Global Data Sys	06024980	1	156.87	156.87	Cisco Systems 802.11a/b/g Low Profile	Supplies
Global Data Sys	06024980	1	217.60	217.50	Cisco Smartnet Wireless LAN Solution	Supplies
Global Data Sys	06024980	1	815.20	815.20	Cisco SW App Supp	Supplies
SoftwareHouseInt'l	06024989	1	1,100.81	1100.81	Software: MSDN Universal	Software
Dell	06025007	1	12,991.60	12991.60	Software: Virtual Infrastructure	Software
Viziflex	ProcureCard	150	3.25	493.50	Keyboard covers	Supplies
Viziflex	ProcureCard	-	6.00	6.00	Shipping	Freight
Wal-Mart	ProcureCard	1	165.93	165.93	Mouse pads,Cables,SurgeOutlet	Supplies
Office DepoT	ProcureCard	1	148.01	148.01	Scroll mouse	Supplies
AtaCom	ProcureCard	8	159.60	197.31	Keyboards	Supplies
AtaCom	ProcureCard	-	37.71	37.71	Shipping	Freight